

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 24

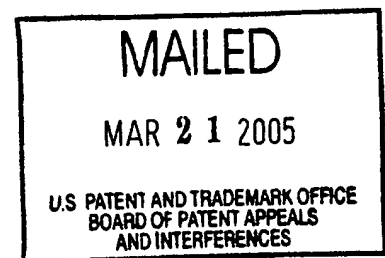
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JIN SOO LEE and HYEON JUN KIM

Appeal No. 2004-1577
Application No. 09/495,250

ON BRIEF



Before DIXON, BLANKENSHIP, and SAADAT, Administrative Patent Judges.

BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 13, 14, and 21-26.

We reverse and remand.

BACKGROUND

The invention relates to a method of searching multimedia data by utilizing user feedback. Claim 13 is reproduced below.

13. A method of constructing a multimedia data comprising:

incorporating a feature information including feature and feature elements of an image; and

incorporating a weight information including weight information of said features and weight information of said feature elements.

The examiner relies on the following references:

| | | |
|--------------------------------|-----------|---------------------------------------|
| Binns et al. (Binns) | 6,041,140 | Mar. 21, 2000 (filed Oct. 4, 1994) |
| Kuperstein et al. (Kuperstein) | 6,128,398 | Oct. 3, 2000 (filed Feb. 9, 1998) |

Claims 13 and 14 stand rejected under 35 U.S.C. § 102 as being anticipated by Kuperstein.

Claims 21-26 stand rejected under 35 U.S.C. § 103 as being unpatentable over Binns.

Claims 1, 2, and 4-11 stand allowed. Claims 3, 12, and 15-20 have been canceled.

We refer to the Rejection (Paper No. 17) and the Examiner's Answer (Paper No. 20) for a statement of the examiner's position and to the Brief (Paper No. 19) and the Reply Brief (Paper No. 21) for appellants' position with respect to the claims which stand rejected.

OPINION

The prior art rejections

Appellants argue in the Brief that Kuperstein does not anticipate the subject matter of claims 13 and 14 because there is no disclosure of incorporating weight information of features and weight information of feature elements.

The rejection (Answer at 4) indicates that the facial image in the reference is a feature that includes feature elements, such as eyes, nose, and mouth. The responsive arguments (Answer at 7), however, indicate that the system will find features such as eyes, nose, mouth, and Kuperstein teaches "that the facial image (feature) includes eyes, nose and mouth, etc[.] (feature elements)."

Kuperstein refers to facial features such as eyes, nose, and mouth (col. 1, ll. 52-55). For the purpose of verifying identity, the Kuperstein system, as described at column 4, line 19 et seq., uses neural networks to determine whether an acquired image of a face matches that stored for the particular person. Feature values are assigned to weights in a neural network (col. 8, l. 46 et seq.). Feature vectors are generated, having a large number of components (e.g., 10,000). Col. 9, ll. 31-34. The normalized dot product (i.e., a number) with respect to the two weight vectors is generated as a measure of similarity between the two images (Fig. 2). Col. 9, l. 65 - col. 10, l. 10.

Kuperstein thus discloses weight information with respect to features, which could perhaps be expressed in the alternative as disclosing weight information with

respect to feature elements. However, the rejection is unclear, and we are unable to ascertain, what may be considered as separate weight information for “features” and for “feature elements.” There is, for example, no disclosure of a separate weighting factor for the facial image as a whole. We thus agree with appellants that the rejection fails to set forth a prima facie case for unpatentability. We cannot sustain the rejection of claims 13 and 14 under 35 U.S.C. § 102 as being anticipated by Kuperstein.

Nor can we sustain the rejection of claims 21-26 under 35 U.S.C. § 103 as being unpatentable over Binns, for the reasons expressed by appellants in the Reply Brief. Binns is directed to generating three dimensional images by correlating two images of the same scene captured from different perspectives. The set of best matches constitutes a correlation of the first and second images. A three dimensional representation is produced from the set of best matches. Col. 4, ll. 18-21. After an initial machine correlation process, the results are displayed on stereo display system 540 (Fig. 5) such that an operator can make judgements about the adequacy of the correlation, and enter data accordingly. Col. 9, ll. 6-40.

Even assuming that the first image may be considered “similar” to the target image, and the second image may be considered “dissimilar” to the target image -- they cannot, since the first and second images are simply different perspectives of the same subject -- there is no clear indication in the rejection as to what the “target image” may be. If the “target image” is the three dimensional representation produced from the first and second images, and repeating iterations for generating a satisfactory three

dimensional representation may be considered “searching” for the target image, then Binns fails at least to teach that the first and second images are correlated to “construct the search criteria” as required by instant independent claims 21 and 24.

Remand

We remand this application to the examiner, under the authority provided by 37 CFR § 41.50(a)(1), to consider a rejection of claims 13 and 14 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Original claim 13 recited “[a] data structure comprising: a feature information including feature and feature elements of an image; and a weight information including weight information of said features and weight information of said feature elements.”

Under the current Office examination guidelines for computer-related inventions, data structures not claimed as embodied in computer-readable media are not statutory. See Manual of Patent Examining Procedure (MPEP) § 2106 at 2100-13 (8th ed., Rev. 2, May 2004), under the heading “Functional Descriptive Material: ‘Data Structures’ Representing Descriptive Material *Per Se* or Computer Programs Representing Computer Listings *Per Se*.”

Present claim 13 does not recite a “data structure,” but purports a method of “constructing a multimedia data,” comprising “incorporating” feature and weight information. We cannot say what the “constructing” and the “incorporating” may represent. Appellants’ Summary of the Invention (Brief at 2-3) does not point out where

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the subject matter of instant claims 13 and 14 is disclosed in the instant specification. Cf. 37 CFR § 1.192(c)(5) (1997) ("*Summary of Invention*. A concise explanation of the invention defined in the claims involved in the appeal, which shall refer to the specification by page and line number, and to the drawing, if any, by reference characters.").

In a Section 101 analysis, the critical question must be answered: "What did the applicant invent?" Arrhythmia Research Technology Inc. v. Corazonix Corp., 958 F.2d 1053, 1059, 22 USPQ2d 1033, 1038 (Fed. Cir. 1992) (quoting In re Grams, 888 F.2d 835, 839, 12 USPQ2d 1824, 1827 (Fed. Cir. 1989)). We leave it to the examiner to apply the Office examination guidelines for computer-related inventions, which begin with the determination of what an applicant has invented and is seeking to patent. See MPEP § 2106, heading "II," at 2100-5.

CONCLUSION

The rejection of claims 13 and 14 under 35 U.S.C. § 102 being anticipated by Kuperstein is reversed. The rejection of claims 21-26 under 35 U.S.C. § 103 as being unpatentable over Binns is reversed.

This remand to the examiner pursuant to 37 CFR § 41.50(a)(1) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)) is made for further consideration of a rejection. Accordingly,

37 CFR § 41.50(a)(2) applies if a supplemental examiner's answer is written in response to this remand by the Board.

This application, by virtue of its “special” status, requires an immediate action. See MPEP § 708.01. It is important that the Board be informed promptly of any action affecting the appeal in this case.

John Lahey

Howard B. Blankenship

Marshall D. Gaddat

MAHSHID D. SAADAT
Administrative Patent Judge

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